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10/761,370	01/22/2004	David Wallach	WALLACH=27A	3756

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action After the Filing of an Appeal Brief	Application No. 10/761,370	Applicant(s) WALLACH ET AL.	
	Examiner ILEANA POPA	Art Unit 1633	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The reply filed 28 December 2009 is acknowledged.

1. ☐ The reply filed on or after the date of filing of an appeal brief, but prior to a final decision by the Board of Patent Appeals and Interferences, will not be entered because:

   a. ☐ The amendment is not limited to canceling claims (where the cancellation does not affect the scope of any other pending claims) or rewriting dependent claims into independent form (no limitation of a dependent claim can be excluded in rewriting that claim). See 37 CFR 41.33(b) and (c).

   b. ☐ The affidavit or other evidence is not timely filed before the filing of an appeal brief. See 37 CFR 41.33(d)(2).

2. ☐ The reply is not entered because it was not filed within the two month time period set forth in 37 CFR 41.39(b), 41.50(a)(2), or 41.50(b) (whichever is appropriate). Extensions of time under 37 CFR 1.136(a) are not available.

   Note: This paragraph is for a reply filed in response to one of the following: (a) an examiner's answer that includes a new ground of rejection (37 CFR 41.39(a)(2)); (b) a supplemental examiner's answer written in response to a remand by the Board of Patent Appeals and Interferences for further consideration of rejection (37 CFR 41.50(a)(2)); or (c) a Board of Patent Appeals and Interferences decision that includes a new ground of rejection (37 CFR 41.50(b)).

3. ☒ The reply is entered. An explanation of the status of the claims after entry is below or attached.

4. ☒ Other: *see continuation sheet*

/Ileana Popa/
Primary Examiner, Art Unit 1633

Appellant argues that antibodies against FIP-2 do not fall within the scope of the claims. This is incorect. The claims recite an antibody specific for RAP-2. Please note that the claims do not require an isolated antibody. Therefore, a polyclonal antibody preparation directed against FIP-2 (which necessarily comprises antibodies specific for RAP-2) falls within the scope of the claims.

Appellant argues that a polyclonal antibody preparation obtained by using FIP-2 as an immunogen would not be specific for RAP-2 (as recited in claim 1) because only some (and not all) of the antibodies from the polyclonal preparation would bind RAP-2. In response to this argument, it is noted that the claim 1 does not require that all antibodies in a polyclonal preparation be specific for RAP-2. Therefore, any polyclonal antibody preparation comprising at least one antibody specific for RAP-2 would fall within the scope of claim 1.

Appellant argues that, since the cited prior art does not disclose anti-FIP-2 antibodies, there is no anticipation rejection and relying on inherency is improper. Specifically, appellant argues that obviousness cannot be established on what is unkown. In response to this argument, it is noted that the obviousness established by the examiner was not based on inherency. Obviousnees was established on the fact that one of skill in the art would have been motivated to raise antibodies against FIP-2. Once raised, these antibodies would necessarily comprise antibodies specific for RAP-2. Inherency flows naturally from following the teachings in the prior art. It is proper to rely on inherency in obviousness-type rejections (see MPEP 2112 [R-2]).

Appellant argues that the examiner provided no evidence that a region in FIP-2 which is 57% homologous to RAP-2 must include epitopes for eliciting an immune response. The examiner does not have to provide what is known in the art. It is common knowledge in the art that stretches of 3 to 5 amino acids are capable of eliciting antibodies. Even references provided by Appellant support this assertion. For example, Woronicz et al. (Science, 1997, 278: 866-869, cited on Appellant's IDS of 01/22/2004) teach both polyclonal and monoclonal antibodies against Flag tag (see p. 868, explanation for Fig. 3 and 4, p. 869, explanation for Fig. 5). Please note that Flag is eight amino acids long (see the enclosed specification for the anti-FLAG monoclonal antibody from Amsbio). Since a stretch of eight amino acids can elicit a polyclonal antibody response, it must necessarily contain several epitopes shorter than eight amino acids, each epitope being specifically recognized by a specific monoclonal antibody. This is evidenced by the enclosed specification from Amsbio, which shows that anti-FLAG monoclonal antibodies can be elicited by the last three amino acids of FLAG. Therefore, fragments as short as 3 amino acids consitute epitopes capable of eliciting antibody responses. The C-termini of FIP-2 and RAP-2 contain eight stretches consisting of 3, 4, 5, and 8 identical amino acids (please see Fig. 3B of the instant specification) and there is no reason to believe that these stretches would not be capable of eliciting antibody responses. Apart from arguments, Appellant did not provide any evidence to the contrary.

With respect to the monoclonal antibodies, Appellant argues that the examiner did not provide reasons to only identify the specific anti-FIP-2 antibodies that would also bind to RAP-2. This is incorrect. The rejection clearly states that, since the prior art teaches the importance of the C-terminal domain for FIP-2 function, one of skill in the art would have been motivated to obtain monoclonal antibodies against this domain to study its role in Fip-2 function.

Appellant's arguments of unexpected results are only based on the fact that RAP-2 was not known in the prior art. However, the fact that RAP-2 was not known in the prior art cannot constitute the basis for unexpected results and it is imaterial to the instant rejection. An argument of unexpected results must be accompanied by data demonstrating that anti-FIP-2 antibodies cannot bind RAP-2. However, apart from arguments, appellant did not provide any evidence to this effect. Binding to RAP-2 is inherent to the anti-FIP-2 antibodies. There is nothing unexpected in the fact that polyclonal antibodies against FIP-2 would also specificaly recognize homologous regions in RAP-2.

For the Board's convenience, Woronicz et al. (Science, 1997, 278: 866-869) and the specification for the anti-FLAG monoclonal antibody from Amsbio are hereby attached.